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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,046	09/09/2003	Vaughn M. Moncrieff	CFT-011CIA	3267

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EXAMINER

TOOMER, CEPHIA D

ART UNIT	PAPER NUMBER
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1714

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/659,046	Applicant(s) MONCRIEFF ET AL.	
	Examiner Cephia D. Toomer	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 19, 2006 has been entered.
2. This Office action is in response to the amendment filed December 19, 2006 in which claim 1 was amended.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has amended claim 1 to include the limitation "wherein said water is substantially 13% of said mixture." The original filed specification, more specifically paragraph 22, does not support this limitation. Paragraph 22 states that "[T]he water would flow at a rate of about 0.13 gpm in an

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emulsifying system with a capacity of about 1 gpm." This recitation does support "substantially 13%" because while the system has a capacity of about 1 gpm, it is not set forth that the system is run at full capacity, i.e., 1 gpm.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 8-16 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nixon (US 3,615,290).

Nixon teaches stable emulsions of normal liquid hydrocarbon comprising a dispersed phase (fuel), at least one nonionic emulsifier as the continuous phase and about 1.5 wt% water and in addition a stabilizer such as succinic anhydride compounds (see abstract). Nixon teaches that the shear rate for forming the emulsion is from about 1,000 to about 50,000 s⁻¹ (see col. 3, lines 60-65). The fuel may be gasoline, diesel, etc. (see col. 4, lines 14-31). The nonionic surfactant may be fatty acid esters of sorbitan, such as sorbitan monooleate (fuel soluble product)(see col. 6, lines 14-29). Nixon teaches that the stabilizer is a corrosion inhibitor such as metal soaps of polyisobutylene succinic anhydride (see col. 7, lines 45-71). Nixon teaches that the components can be added in any order desired or all of them can be added

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simultaneously. However, it is preferred that the emulsifiers and corrosion inhibitor are first added to the continuous phase, then the hydrocarbon fuel is added to the continuous phase. High-speed blenders are generally used (see col. 7, lines 16-44) and the fuel composition may contain dispersants (see col. 5, lines 26-29).

Nixon teaches the limitations of the claims other than that the emulsifier is a package. However, it would have been obvious to one of ordinary skill in the art to prepare a package because Nixon teaches that the emulsifier, corrosion inhibitor and continuous phase are prepared first, thus suggesting a package. With respect to the recirculating step, it would have been obvious to one of ordinary skill to perform this step because it would ensure proper mixing before the shearing step.

7. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nixon (US 3,615,290) in view of Basu (US 6,270,541).

Nixon has been discussed above. Nixon fails to teach that the fuel is a non-hydrocarbonaceous fuel. However, Basu teaches this difference. Basu teaches a diesel fuel using methanol and dimethyl ether. Basu also teaches that the composition may contain a conventional diesel fuel or a biodiesel (see abstract; col. 4, lines 56-60).

It would have been obvious to one of ordinary skill in the art to employ non-hydrocarbon fuels because Basu teaches that these compositions perform as well as hydrocarbon fuels, such as the diesel fuel disclosed in Nixon.

8. Applicant's arguments have been fully considered but they are not persuasive.

Applicant argues that claim 8 and its dependents are allowable because Nixon teaches away from the use of more than 1.5% water.

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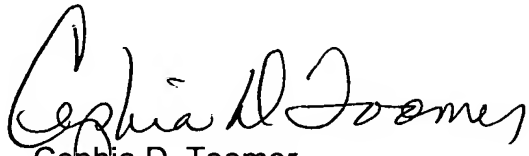
Claim 8 is an independent claim and does not contain all of the limitations as set forth in claim 1. Claim 8 is not limited to the amount of water that may be present during the preparation of the fuel emulsion.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Cephia D. Toomer
Primary Examiner
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